



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

on

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,281	06/29/2001	Dwight H. Warkentin	P-9002.00	7746

27581 7590 05/19/2003
MEDTRONIC, INC.
710 MEDTRONIC PARKWAY NE
MS-LC340
MINNEAPOLIS, MN 55432-5604

EXAMINER

OROPEZA, FRANCES P

ART UNIT	PAPER NUMBER
----------	--------------

3762

DATE MAILED: 05/19/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,281

Applicant(s)

WARKENTIN, DWIGHT H.

Examiner

Frances P. Oropeza

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/29/01(Filing) and 3/8/02 (P. Amend.).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 8-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 42-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). 6.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7 and 42-47, drawn to a pacing system and method of use, classified in class 607, subclass 9.
 - II. Claims 8-29, drawn to a pacing system for ventricular sites and a method of operating the system, classified in class 607, subclass 9.
 - III. Claims 30-41, drawn to an AV sequential cardiac pacing system, classified in class 607, subclass 9.

The inventions are distinct, each from the other because of the following reasons:

Inventions I. and II. are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I. has separate utility such as a pacing system/ method for delivering electrical stimulation to the heart not requiring the measured interval to be the ventricular timing. See MPEP § 806.05(d).

Inventions I. and III. are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I. has separate utility such as a pacing system/ method for delivering electrical stimulation to the heart not requiring the measured interval to be the atrio-ventricular timing. See MPEP § 806.05(d).

Inventions II. and III. are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if

Art Unit: 3762

they are shown to be separately usable. In the instant case, invention II. has separate utility such as a pacing system / method for pacing the ventricular sited not requiring the timing out of an AV delay. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation between Michael C. Soldner and Frances P. Oropeza on 4/29/03, a provisional election was made without traverse to prosecute the invention of Group I., claims 1-7 and 42-47. Affirmation of this election must be made by applicant in replying to this Office action. Claims 8-41 are withdrawn from further consideration by the Examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 42-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Keival et al. (US 5749906). Kieval et al. disclose a cardiac pacing system (figure 3 – 300, 360, 330) comprising a timing circuit, a sensing circuit to measure the duration of the QRS complex by way of the FFRSs, and a control circuit to adjust the length of the time interval based on the measured duration of the QRS complex. The acceptable percentage of fusion is read to be zero (col. 3 @ 18-33; col. 5 @ 29-65; col. 9 @ 40-45).

As to claims 2 and 43, the sensing circuit senses an atrial depolarization, an SAV delay is begun and a ventricular pacing pulse is delivered to a first ventricular site upon expiration of the SAV delay by the output circuit (340) (col. 5 @ 49-56 and 60-65; col. 8 @ 2-9 and 21-22).

As to claims 3 and 45, a circuit delivers a pacing pulse to an atria upon expiration of an escape interval, a PAV delay is initiated upon deliver of the pacing pulse, and a circuit delivers a pacing pulse to the first ventricular site upon expiration of the PAV delay (col. 5 @ 49-56; col. 7 @ 58-64; col. 8 @ 21-22).

As to claims 4 and 47, a circuit delivers a second ventricular pacing pulse to a second ventricular site upon expiration of the V-V delay (col. 5 @ 49-56).

As to claims 5, 44 and 46, it is inherent the first ventricular site would be the right ventricle when the sense/ pace is associated with the right atria, hence and the second ventricular site would be the left ventricle.

As to claims 6, 44 and 46, it is inherent the first ventricular site would be the left ventricle when the sense/ pace is associated with the left atria, hence the second ventricular site would be the right ventricle.

As to claim 7, a circuit delivers a pacing pulse to the other of the atria
(col. 5 @ 49-56; col. 7 @ 58-63).

Claim Objections

3. Claims 42-47 are objected to because in line 5 of claim 42 it appears "the least" should be --the at least--. Appropriate correction is required.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fran Oropeza, telephone number is (703) 605-4355. The Examiner can normally be reached on Monday – Thursday from 6 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Angela D. Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4520 for regular communication and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist, telephone number is (703) 308-0858.

Frances P. Oropeza
Patent Examiner
Art Unit 3762

FPO
5/15/03

Angela D. Sykes

ANGELA D. SYKES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700